December 30, 2020

Ref: 20575.00

Mr. Richard Schermerhorn
c/o Joseph Dannible
Schermerhorn Real Estate Holdings
536 Bay Road #2
Queensbury, NY 12804

Re: Traffic Evaluation, Proposed Town Home Cottages Development, Dix Avenue, Town of Kingsbury, NY

Dear Mr. Schermerhorn,

VHB has conducted a traffic evaluation to assess the potential traffic impacts associated with a proposed residential development consisting of 96 townhome units located on Dix Avenue (NY Route 32) in the Town of Kingsbury. The site was previously approved for a 100 unit senior housing development. The proposed Conceptual Site Plan, prepared by Environmental Design Partnership and dated October 1, 2020 is attached to this letter.

This letter includes an evaluation of the peak hour site trip generation for the proposed project and a comparison to the previously approved senior housing development on the site. As detailed herein, the proposed project is expected to have minimal impact on local traffic operations.

Site Location and Proposed Development

The project site, as shown in the image below, is located on the north side of Dix Avenue, east of Queens Drive and is currently undeveloped. The proposed project includes construction of 96 multi-family residential townhome units in 10 four-unit buildings and 7 eight-unit buildings. Access to the site is proposed via a full access driveway on Dix Avenue and via a full access connection to Queens Drive. The project is expected to be completed in 2021 and is illustrated on the aerial image below.

Engineers | Scientists | Planners | Designers

100 Great Oaks Boulevard
Suite 118
Albany, New York 12203
P 518.389.3600
F 518.452.0324

Existing Conditions

Study Area Roadways

Dix Avenue is classified as principal arterial - other extending east from Ridge Street in Glens Falls to the intersection with US Route 4. Near the project site, Dix Avenue is designated NY Route 32 and provides a single 11 foot wide travel lane in each direction with 3 foot wide paved shoulders and has a posted speed limit of 35-mph. A narrow sidewalk is present on the north side of Dix Avenue along the project frontage. Traffic volume data collected in 2018 by NYSDOT indicates that near the project site, Dix Avenue serves approximately 11,550 vehicles per day (vpd). Land uses in the project vicinity are a mix of residential, commercial, institutional, and recreational.

Queens Drive is a local road extending north from Dix Avenue approximately 600 feet providing access to the Kingswood Village Apartments, Ginny Rae's restaurant, and Sutherland's Petworks. Queens Drive provides a single 11-12 foot wide travel lane in each direction with 3-6 foot wide paved shoulders/drainage edges and does not have a posted speed limit. There are no sidewalks on Queens Drive. Land uses on Queens Drive are residential to the north and commercial to the south adjacent to Dix Avenue.

Traffic Volumes

The most recent traffic data collected by NYSDOT (2018) near the proposed project, is summarized below in Table 1. The data can be referenced on the NYSDOT Traffic Data Viewer (www.dot.ny.gov/tdv).

Table 1 Existing Traffic Volume Summary

	AADT	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
Location	Volume [a]	Vol [b]	K Factor [c]	Dir. Dist.	Volume	K Factor	Dir. Dist.
Dix Avenue	11,528	698	6.1%	62% WB	996	8.6%	56% EB

Source NYSDOT data collected in August 2018.
AADT = Annual Average Daily Traffic
a Daily traffic expressed in vehicles per day.
b Peak hour volumes expressed in vehicles per hour.
c Percent of daily traffic which occurs during the peak hour.

As shown in Table 1 Dix Avenue carries approximately 11,528 vpd with 6.1% of the daily traffic occurring during the weekday morning peak hour and 8.6% occurring during the weekday evening peak hour. Dix Avenue traffic is heavier in the westbound direction during the weekday morning peak hour and heavier in the eastbound direction during the weekday evening peak hour. Based on a review of the data, the weekday morning peak hour occurs from 8:00 to 9:00 AM and the evening peak hour occurs from 4:00 to 5:00 PM.

Transit Accommodations

Transit service in the region is provided by Greater Glens Falls Transit (GGFT). Route 4: Hudson Falls-Fort Edward travels along Dix Avenue providing service six days a week. The nearest bus stop to the project site is approximately 0.3 miles west of the site at the intersection of Dix Avenue and Feeder Street/Dean Road. Service along this route is generally provided from approximately 6:20 AM to 6:50 PM on weekdays and from 8:10 AM to 6:40 PM on Saturdays.

Site Generated Traffic Volumes

To estimate the site-generated traffic, the Institute of Transportation Engineers' (ITE) publication *Trip Generation, 10th Edition*[1] was utilized. The number of vehicle trips generated by the proposed project was estimated based on ITE land use code (LUC) 220 – Multifamily Housing (Low-Rise). A summary of the trip generation estimate is provided in Table 2. As noted, the site was previously approved by the Town for the development of 100 attached senior housing units. Table 2 also provides a comparison between the trip generation estimate contained in the traffic evaluation for the previously approved project and the current proposal. The previous traffic evaluation, prepared by T.R. Johnson Engineering, PLLC and dated January 22, 2015 is included in Attachment B.

1 Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, Washington D.C., 2017.

Table 2 Trip Generation Summary

Weekday Time Period	Movement	Current Proposal Multi-family Housing [a]	Previous Proposal Senior Housing – Attached [b]	Change in Peak Hour Trips [c]
Morning Peak Hour	Enter	11	7	+4
	Exit	35	13	+22
	Total	46	20	+26
Evening Peak Hour	Enter	36	14	+22
	Exit	21	12	+9
	Total	57	26	+31

a Trip generation estimate based on ITE LUC 220 (Multifamily Housing (Low-Rise)) for 96 units
b Trip generation estimate from previous proposal in T.R. Johnson Engineering PLLC traffic evaluation
c Change in trips between current proposal and previous approval

Based on the projections outlined above in Table 2, the proposed project is expected to generate 46 new vehicle trips during the AM peak hour (11 entering and 35 exiting) and 57 new vehicle trips during the PM peak hour (36 entering and 21 exiting). As illustrated, this results in an increase of 26 trips during the AM peak hour and 31 trips during the PM peak hour over the previous approval at the site. It is noted that the site plan for the senior housing project identified an area designated as "REMAINDER OF SITE RESERVED FOR FUTURE DEVELOPMENT" indicating the potential for additional trip generation at the site. While the estimated trips have increased from the previously approved 100-unit senior housing development, there is no potential for additional development on the site as currently proposed with 96 residential units. Additionally, the site generated trips will result in less than the NYSDOT and ITE threshold of the generation of 100 vehicle trips on a single intersection approach for determining the need for off-site intersection analysis. These agency thresholds were developed as a tool to identify locations where the magnitude of traffic generated has the potential to impact operations at off-site intersections and screen out locations that do not meet the threshold and are therefore unlikely to require mitigation. Based on the trip generation and these industry guidelines, the qualitative evaluation of traffic adequately assesses the traffic associated with the proposed development.

Based on a review of existing travel patterns and area destinations, it is expected that during the peak weekday commuter travel periods approximately 60% of the site-generated traffic will travel to and from the west on Dix Avenue and 40% will travel to and from the east. This distribution will result in an increase of 28 vehicle trips west of the site (7 eastbound and 21 westbound) and 18 vehicle trips east of the site (14 eastbound and 4 westbound) during the AM peak hour. During the PM peak hour, the distribution will result in an increase of 35 vehicle trips west of the site (22 eastbound and 13 westbound) and 22 vehicle trips east of the site (8 eastbound and 14 westbound). This magnitude of traffic increase will be accommodated for by the existing roadway network and does not result in the need for off-site mitigation.

It is expected that residents of the proposed project will primarily access the site through the main site access intersecting Dix Avenue. The access to Queens Drive will primarily serve to provide a second access to the site for emergency vehicles. It is noted that Dix Avenue is generally straight and flat in the vicinity of the project site providing clear lines of sight in both directions along the roadway.

Conclusions

VHB has conducted a traffic evaluation to assess the potential traffic impacts associated with a proposed residential development consisting of 96 multi-family residential town home cottages located on Dix Avenue in the Town of Kingsbury. Access to the site is proposed via two full access driveways one on Dix Avenue and one on Queens Drive. The site was previously approved for a 100-unit senior housing project with the potential for additional development on the site. The project is expected to be completed in 2021. The following is noted:

- The proposed project is expected to generate 46 new vehicle trips during the AM peak hour (11 entering and 35 exiting) and 57 new vehicle trips during the PM peak hour (36 entering and 21 exiting). The site generated trips will result in less than the NYSDOT and ITE threshold of the generation of 100 vehicle trips on a single intersection approach for determining the need for off-site intersection analysis. Trips associated with the proposed project will be accommodated for by the existing roadway network.
- The distribution of the site-generated traffic on Dix Avenue will result in a maximum increase of 21 AM peak hour and 22 PM peak hour vehicle trips travelling to and from the site in any direction along Dix Avenue. This magnitude of traffic associated with the proposed project will be accommodated for by the existing roadway network. No mitigation is recommended.
- The existing narrow sidewalk along the Dix Avenue project frontage will be replaced with a 5-foot sidewalk as part of the project improving the pedestrian accommodations.

As noted, the site will be accommodated for by the existing surrounding roadway network and the magnitude of traffic with minimal impacts on local traffic operations.

If you have any questions on the above evaluation, please call.

Sincerely,

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.

Wendy C. Holsberger, PE, PTOE
Transportation Director
wholsberger@vhb.com

Alanna M. Moran
Project Manager
amoran@vhb.com

Attachments

Attachments

A. Conceptual Site Plan

B. TR Johnson Traffic Evaluation

Attachment A – Conceptual Site Plan

SITE VICINITY MAP
SCALE: 1" = 500'

SITE STATISTICS

EXISTING ZONING	LDR-25 LOW DENSITY RESIDENTIAL
PARCEL AREA	15.67± ACRES
PROPOSED USE	TOWN HOMES
PROPOSED UNITS	96
BUILDING SETBACKS:	
FRONT	80 FT
SIDE	25 FT
REAR	50 FT
PARKING	96 GARAGE
	96 EXTERIOR
	TOTAL 192
LOT COVERAGE	32%
GREEN SPACE	68%
UTILITIES	
STORMWATER MANAGEMENT	ON-SITE
WATER PROVISIONS	MUNICIPAL CONNECTION
SANITARY PROVISIONS	PRIVATE SEPTIC SYSTEMS

SITE LOCATION MAP
SCALE: 1" = 2,000'

GRAPHIC SCALE
60 50 40 30 20 10 0 30 60 120 240
(IN FEET)
1 INCH = 60 FT.

PROPOSED TOWN HOMES FOR
DIX AVE TOWN HOME COTTAGES
OWNER/APPLICANT: SCHERMERHORN REAL ESTATE HOLDINGS LLC

DIX AVENUE
TOWN OF KINGSBURY
WASHINGTON COUNTY, NEW YORK

TAX MAP No. 146.14-1-3
OCTOBER 1, 2020

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
208 Route 146 Clifton Park, New York 12065
(518) 371-7621 www.edp-ny.com

DRAWN BY	XXX
CHECKED BY	XXX
EDP PROJECT NUMBER	XXX

REVISION	DATE	BY
REVISIONS	00/00/00	XXX

SCALE:
1"=60'

SHEET TITLE:
CONCEPTUAL SITE PLAN

SHEET:
1 of 1

G:\WASHINGTON\KINGSBURY\Dix Ave\DIX AVE - SCHERMERHORN\DP-dwg\Concept\CONCEPT.dwg Nov 18, 2020 12:25:54PM, NW

Attachment B – TR Johnson Traffic Evaluation

T.R. JOHNSON ENGINEERING, PLLC
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING

"Proudly Powered by Solar Energy"

January 22, 2015

Mr. Richard Schermerhorn
Schermerhorn Residential Holdings, LLC
536 Bay Road, Suite 2
Queensbury, NY 12804

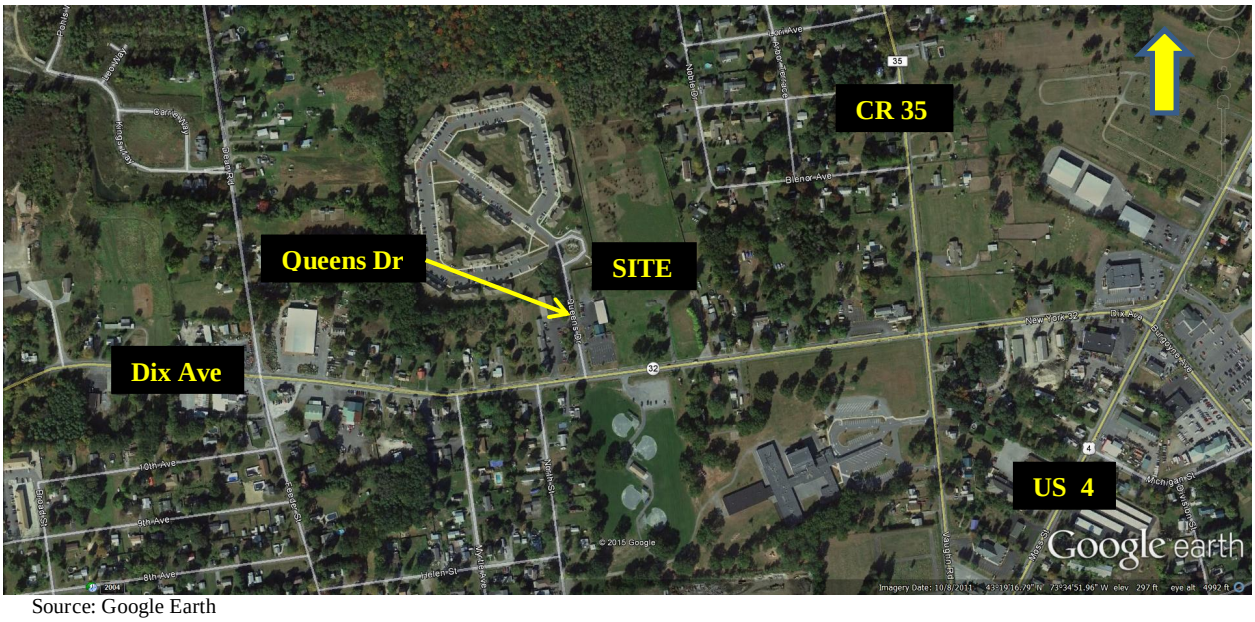
RE: Traffic Engineering Evaluation, Proposed Senior Housing, Dix Avenue, Town of Kingsbury, NY; Project No. 026-15-001.

Dear Mr. Schermerhorn:

T.R. Johnson Engineering, PLLC has completed a Traffic Engineering Evaluation for the proposed 100-unit Senior Housing project on Dix Avenue in the Town of Kingsbury. This evaluation is based on the Concept Site Plan prepared by *Environmental Design Partnership*, dated October 29, 2014 (attached). The purpose of this evaluation is to summarize the trip generation of the project and to provide an assessment of its potential traffic impacts.

A. Background

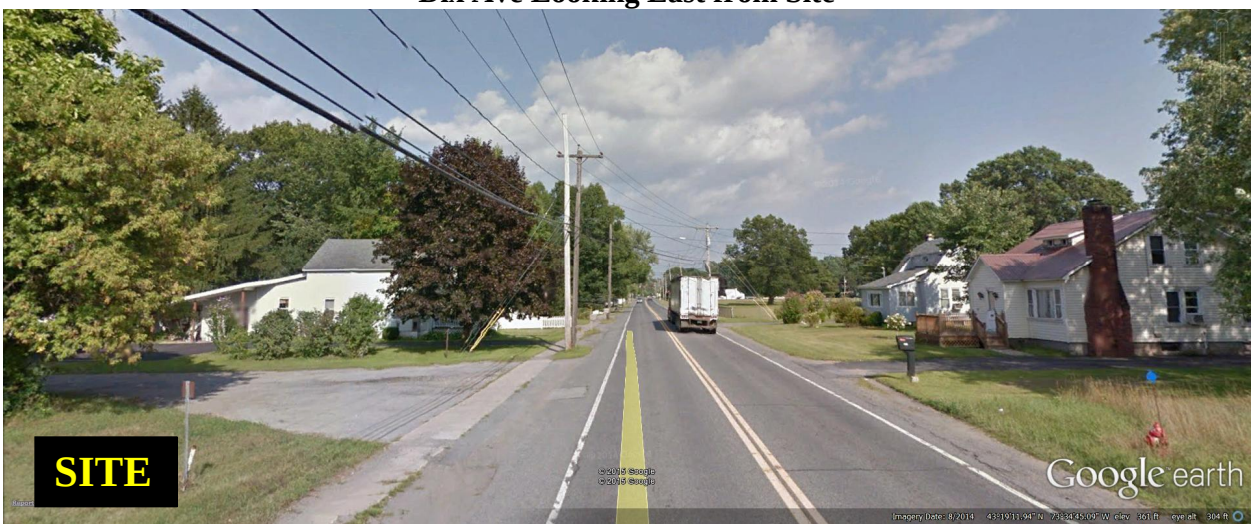
The proposed project consists of the development of 100 units of Senior Housing in a single building. The site is located on the north side of Dix Avenue (NY Route 32) approximately 1,000 feet west of the signalized intersection of Dix Avenue/CR 35 (Vaughn Road). Primary access to the site is proposed from one driveway on Dix Avenue. A secondary access is proposed from the cul-de-sac on Queens Drive. Queens Drive is located about 450 feet to the west of the proposed primary access. The project site is currently vacant. The site location is shown below.



Source: Google Earth

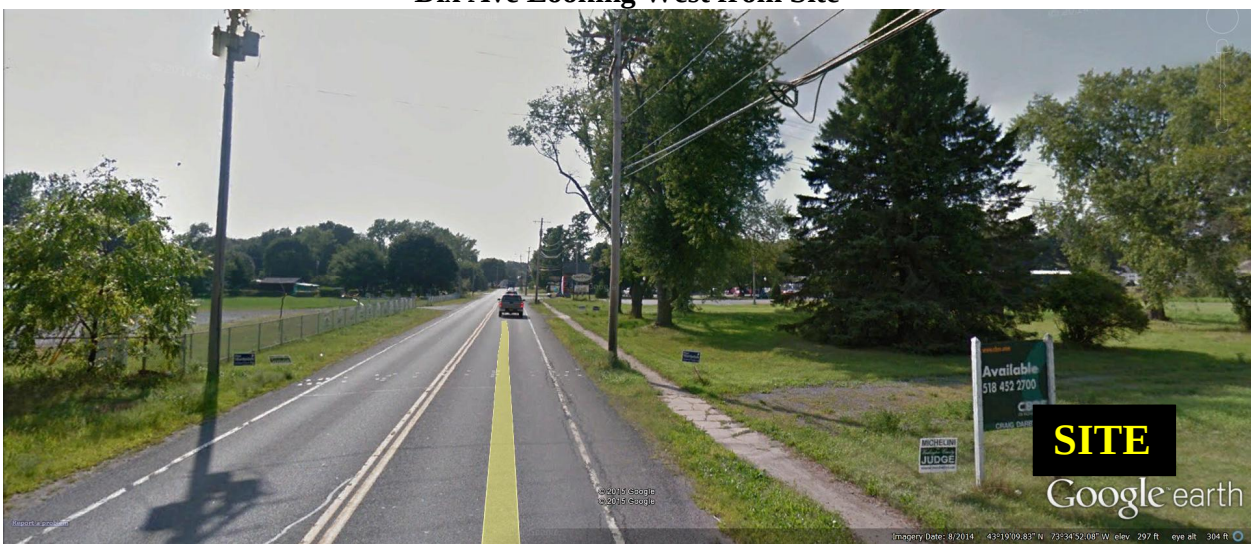
Dix Avenue provides east-west access in the Town of Kingsbury extending from US Route 4 into the City of Glens Falls to the west. At the site, Dix Avenue is NY Route 32. Dix Avenue consists of one 11' lane in each direction with 3' shoulders and a posted area speed limit of 35 mph. The Annual Average Daily Traffic (AADT) volume collected by NYSDOT in 2011 is 12,700 vehicles per day (vpd). The land uses surrounding the project site are a mix of residential, recreational, educational, and small business. The location of the site driveway will be along a straight and level section of Dix Avenue. The photos below show Dix Avenue in the vicinty of the proposed site drive.

Dix Ave Looking East from Site



Source: Google Earth

Dix Ave Looking West from Site



Source: Google Earth

B. Traffic Assessment

Trip generation determines the quantity of traffic expected to travel to and from a given site. The Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition*, is the industry standard for determining trip generation for proposed land uses based on studies of similar existing developments located across the country. Land Use Code (LUC) 252 for *Senior Housing – Attached* was used to

estimate the number of trips generated by the proposed project. The peak hour trip generation estimate is summarized in Table 1.

Table 1 – Trip Generation Summary

Land Use	LUC	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Senior Housing – Attached (100 units)	252	7	13	20	14	12	26

The project is expected generate a total of 20 trips during the AM peak hour and a total of 26 trips during the PM peak hour. This volume equates to one trip every 2 – 3 minutes in the peak hours. This is a minimum amount of additional traffic that will be added to the roadway network. Therefore, the proposed Senior Housing project will not adversely affect the traffic operations on Dix Avenue or the surrounding roadway network.

Please call me if you have any questions on this traffic evaluation.

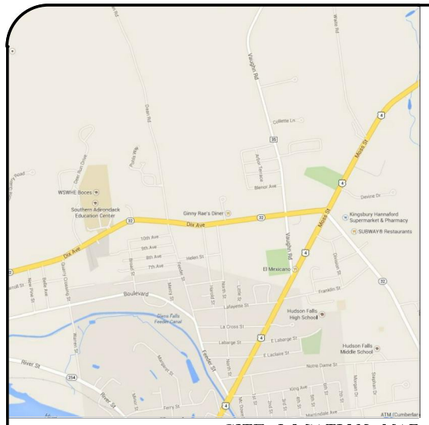
Sincerely,
T.R. Johnson Engineering, PLLC

Thomas R. Johnson, P.E., PTOE
Principal

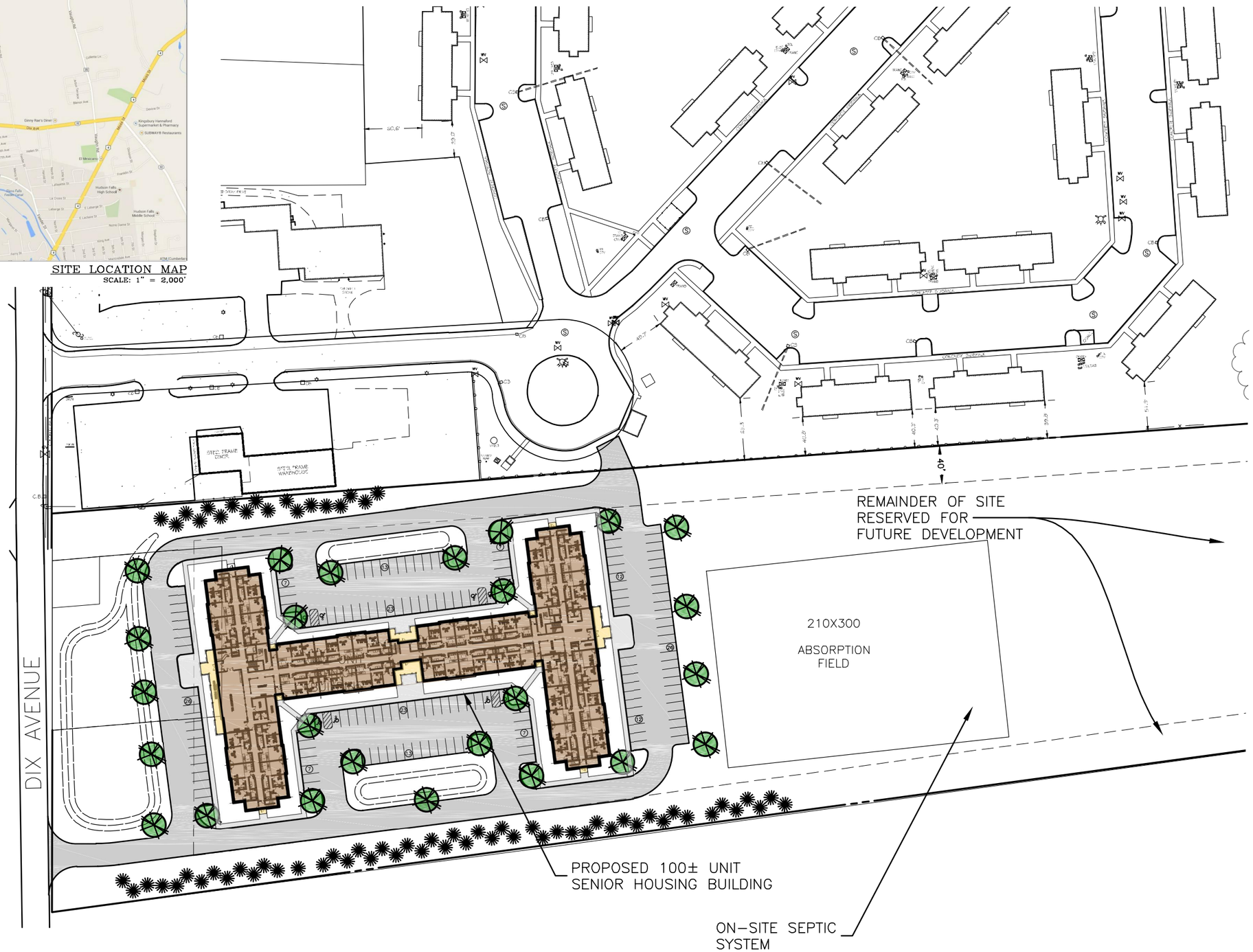
Attachment

c: Joseph Dannible, RLA, EDP

C:\ \001 Dix Ave Sr Housing\Reports\Traffic Assessment.docx



SITE LOCATION MAP
SCALE: 1" = 2,000'



PROPOSED APARTMENT USE
SCHERMERHORN

TOWN OF KINGSBURY
WASHINGTON COUNTY, NEW YORK
OCTOBER 29, 2014

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
ROUTE 146 CLIFTON PARK, N.Y. 12065 (518) 371-7621
ENGINEERING LANDSCAPE ARCHITECTURE LAND SURVEYING

SHEET TITLE
CONCEPT
SITE PLAN
1

REVISIONS	DATE	BY

SCALE:
1" = 80'

SHEET No.
1

Q:\BY LOCATION\WASHINGTON\KINGSBURY\DIX AVE - SCHERMERHORN\dwg\CONC_1_DIX_AVE.dwg Oct 30, 2014 12:32:24PM